

REMARKS

In the Office Action mailed October 16, 2006, claims 2-5 and 16-23 were "objected to"; claims 1, 6 and 8-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent Publication No. 2003/0109243) in view of Saito (U.S. Patent No. 4,761,824); claims 10-12 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Abe (U.S. Patent No. 5,834,857); claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chang and Saito in view of Official Notice; and claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chang and Abe in view of Saito. The foregoing rejections and Official Notice are respectfully traversed.

The Applicant respectfully thanks the Examiner for the Telephone Conference conducted on November 1, 2006.

None of the claims have been amended.

Claims 1-13 and 15-23 are pending and under consideration. Reconsideration is respectfully requested.

Regarding the 103 rejection of claims 1, 6, 7 and 8-9:

None of the foregoing references relied upon, individually or combined, discuss "a mobile device having an overcurrent cutoff function and at least one function module, the mobile device comprising: a main power supply which supplies power to the mobile device; a power detection unit which detects whether power from the main power supply to the mobile device is cut off, and generates a power cutoff signal when the power is cut off; a backup power supply unit which supplies a backup power to the mobile device when the power from the main power supply to the mobile device is cut off; and a control unit comprises application programs and an operating system, and runs the application programs or controls the at least one function module, and communicates data lines and control signal lines with the at least one function module, and converts potential levels of the data lines and control signal lines connected with the at least one function module to a predetermined potential level in response to the power cutoff signal and then generates a backup power supply enable signal to enable the backup power supply unit to supply power". Claim 8 recites features somewhat similar to those of claim 1.

Chang merely discusses a portable electronic device with power failure recovery. The portable electronic device is powered by a main power source, which comprises a power detection module, a processor, a timing unit and a power management unit. The power detection module detects an output characteristic from the main power source so as to assert an

interrupt signal if the detected output characteristic is below a first threshold value. In response, the processor asserts a turn-off signal and an enable signal. In response to the enable signal, the timing unit asserts a notification signal at a predetermined time interval when the enable signal is asserted in which the timing unit is directly powered by a backup power source. Chang also discloses a power failure recovery which includes a power detection module and a volatile RAM, a processor, a timing unit and a power management unit (see paragraph [0009] and FIG. 2, for example).

At page 2 of the Office Action, the Examiner admits that Chang fails to discuss “a control unit ...[which] converts potential levels of the data lines and control signal lines connected with the at least one function module to a predetermined potential level in response to the power cutoff signal and then generates a backup power supply enable signal to enable the backup power supply unit to supply power,” as recited in claim 1, for example. However, the Examiner asserts that Saito discusses this feature.

In contrast, Saito merely discusses a mobile communication apparatus which includes a transmitter, a receiver and a control circuit. **The control circuit which monitors the DC output of the battery, has a reset function to turn off the transmitter when the DC output falls below a prescribed level.** The control circuit also detects an instantaneous drop in the DC output level and further distinguishes the instantaneous voltage drop caused by the deterioration of the battery from any other instantaneous voltage drop (see column 2, lines 32-53). When the voltage falls below a prescribed level a reset voltage detector circuit changes its output from a high to a low level and the output of the controller circuit changes to its low level to turn off the transmitter. The battery voltage is quickly restored by the turning-off of the transmitter as shown in FIG. 3B. When the voltage is increased to or above the prescribed level, the output is changed from a low to a high level (see column 3, lines 43-47). In Saito, the battery voltage merely has to deteriorate below a prescribed level, which means the power is not completely “cut off”. Instead, Saito is trying to differentiate between battery deterioration and interference. Therefore, Saito prevents the cut-off of the power by determining that the voltage level has dropped in order to turn off the transmitter to thereby bring the voltage level back up and then turn the transmitter back on. However, in Saito, if it is determined that the drop in voltage is extended due to a deterioration of the battery, the transmitter will not be turned back on even if a the battery voltage rises above the threshold. Further, the Examiner admits at page 8 of the Office Action, that neither Chang nor Saito discuss the separation of a battery pack and the power detection unit generating a power cutoff signal.

In the present invention, power supply from the main battery is completely cut off and the

control unit “**converts the potential levels of the data lines and control signal lines connected with the at least one function module to a predetermined potential level in response to the power cutoff signal**” and then generates a backup power supply enable signal to enable the backup power supply unit to supply power,” as recited in claim 1, for example. The Applicant respectfully traverses the Examiner’s assertions of obviousness as discussed at pages 3-10 of the Office Action as well as the Examiner’s Official Notice as discussed on page 9 of the Office Action. The Applicant respectfully request that the Examiner withdraw these assertions of obviousness and the Official Notice or provide reference(s) to support these assertions.

Thus, the combination of Chang and Saito fails to establish a prima facie case of obviousness over the present invention. Therefore, it is respectfully submitted that the rejection is overcome.

Regarding the 103 rejections of claims 10-13 and 15 and objections to claims 16-23:

At page 7 of the Office Action, the Examiner admits that Chang does not discuss the Applicants “backup power supply unit” as recited in claim 10. However, the Examiner asserts that Abe discusses this feature.

The Applicant respectfully submits that Abe discusses a power supply device which has **a main power supply control unit 15 including a DC/DC converter 22** (see FIG. 2, for example), Abe fails to make up for the deficiencies of Chang and Saito as mentioned above. That is, none of the foregoing references, individually or combined, disclose the features as recited in claim 10, for example. Thus, the combination of Chang, Abe and Saito fails to establish a prima facie case of obviousness over the present invention.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or discuss all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and **not based on applicant's disclosure**. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. § 2142.

Withdrawal of the rejections is respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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